ILLUSTRATED KEYS TO THE IDENTIFICATION OF THE BIRDS OF PREY OF BRITISH COLUMBIA

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ILLUSTRATED KEYS TO THE IDENTIFICATION OF THE BIRDS OF PREY OF BRITISH COLUMBIA

by

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CONTENTS

Foreword v

Acknowledgements vi

Introduction 1

Classification of Birds of Prey 2

Checklist of Birds of Prey of British Columbia 3

General Key to Birds of Prey of British Columbia 4

Key to Order Falconiformes 5

Key to Family Accipitridae 6

Species Notes for Family Cathartidae and Accipitridae . 11

Key to Family Falconidae 18

Species Notes for Family Falconidae 20

Key to Order Strigiformes 23

Key to Family Strigidae 24

Species Note for Family Tytonidae and Strigidae 28

Additional References 36

Appendix 1. The Parts of a Falcon 37

FOREWORD

This report is the first in a series to be issued by the British Columbia Conservation Officer Service, Ministry of Environment. Over the years, Conservation Officers have had the unique opportunity to gain first-hand experience in developing and refining techniques related to enforcement duties. A goal of this series is to make available, to a wider audience, the results of those experiences.

This particular report is the result of a workshop given by Wayne Campbell to the Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES) in Vancouver in 1987. Participants to the conference were from enforcement agencies throughout North America and all agreed that correct identification of birds of prey was critical for their work, especially during investigations. They also wanted simple keys, easy to understand, that could quickly and accurately be used by enforcement officers. The present keys have been developed to meet that end.

Future reports will appear from time-to-time as new enforcement techniques are developed and other training techniques and information becomes available.

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The book was designed by Spring Ridge Design.

INTRODUCTION

Each year hundreds of dead hawks and owls are picked up by the general public, as well as enforcement officers, and brought into Ministry of Environment offices for identification. Sometimes naming those birds is confusing since standard field guides, and other reference books, usually include all birds of prey found in North America. Therefore, distinguishing raptors specifically from British Columbia can be difficult.

The purpose of this publication is to provide enforcement staff, and the general public, with a fast but accurate and simple guide to identifying native birds of prey found in British Columbia. In the keys which follow, only obvious identification features are used to separate groups and species of birds of prey. The keys refer only to carcasses in hand, not to live birds in the field.

The simple keys are divided into three major sections:

(1) A general key separates **DIURNAL BIRDS OF PREY** (vultures, ospreys, eagles, harriers, hawks, and falcons) from **NOCTURNAL BIRDS OF PREY** (owls). It should be noted that some species of owls are not nocturnal and are active primarily during daylight hours.

(2) A specific key separates families and species of **FALCONIFORMES** or **DIURNAL BIRDS OF PREY**.

(3) A specific key separates families and species of **STRIGIFORMES** or **NOCTURNAL BIRDS OF PREY**.

To assist identification, additional notes are provided on plumage and distribution for all birds of prey which regularly occur in British Columbia. These species notes include status, relative abundance, a distribution map, and major plumage characteristics. The status definitions have been extracted directly from *Birds of British Columbia - Nonpasserines* to be published in early 1990 by the Royal British Columbia Museum.

The following abundance and status definitions have been used. The species are divided into those of "regular" or "irregular" occurrence and defines categories by numbers of individuals seen per day per locality. These categories are:

RELATIVE ABUNDANCE

Regular Occurrence (usually reported annually)

Abundant	- 200 to 1,000 individuals per day per locality.
Very common	- 50 to 200 individuals per day per locality.
Common	- 20 to 50 individuals per day per locality.
Fairly common	- 7 to 20 individuals per day per locality.
Uncommon	- 1 to 6 individuals per day per locality.
Rare	- 1 to 6 individuals per season.

STATUS

Irregular Occurrence (not reported annually)

Very rare	- over 6 records, but of very infrequent occurrence.
Casual	- 2 to 6 records, all time.
Accidental	- only 1 record.
Resident	- A species that remains throughout the year in the area under reference (e.g. Great Horned Owl).
Migrant	- A species that migrates to the area under reference and winters or breeds. Does not remain in the area under reference throughout the year (e.g. Broad-winged Hawk, Flammulated Owl). Does not include a species that wanders in the nonbreeding season (e.g. Northern Hawk Owl).
Visitant	- A species that is present in the area under reference only at certain times of the year. Breeding or overwintering status for a migrant (e.g. Snowy Owl).

CLASSIFICATION OF BIRDS OF PREY

It is important to understand how birds of prey are classified by ornithologists. This will assist in the use of the keys which follow.

All birds constitute a single group of animals, the Class Aves. A Class is divided into "Orders" which are further divided into "Families," members of which resemble each other.

For example, a Peregrine Falcon *(Falco peregrinus)* and a Great Horned Owl *(Bubo virginianus)* are classified as follows:

	Peregrine Falcon	Great Horned Owl
KINGDOM	Animal	Animal
PHYLUM	Chordata (with back bone)	Chordata
CLASS	Aves (birds)	Aves
ORDER	Falconiformes (vultures, ospreys, eagles, harriers, hawks, and falcons)	Strigiformes (owls)
FAMILY	Falconidae (falcons)	Strigidae (true owls)
GENUS	*Falco* (Latin for "falcon")	*Bubo* (Latin for "horned owl")
SPECIES	*peregrinus* (Latin for "wandering" or "foreign")	*virginianus* (Latin for "Virginia" where species was first found)

In addition there are subspecies or geographical races for many species. For example, the Peregrine Falcon has three subspecies in British Columbia. A "Peales" Peregrine Falcon *(Falco peregrinus pealei)* occurs along the coast, a "Continental" Peregrine Falcon *(F.p. anatum)* occurs in the interior, and a "Tundra" Peregrine Falcon *(F.p. tundris)* migrates through the province from its arctic breeding grounds. All are recognizable by plumage.

Common names are standardized in North America and, for birds of prey, are related to the bird's appearance (e.g. Red-tailed Hawk), calls (e.g. Northern Saw-whet Owl), habitat (e.g. Prairie Falcon), who named it (e.g. Cooper's Hawk and Swainson's Hawk), or region where it occurs (e.g. American Kestrel).

CHECKLIST OF BIRDS OF PREY OF BRITISH COLUMBIA

There are 34 species of birds of prey recorded in British Columbia. Of these, 19 species are "hawks" and 15 species are owls. One species, the Eurasian Kestrel, has only been found once in the province and is, therefore, not included in the keys that follow.

The complete list is as follows:

Order FALCONIFORMES: Diurnal Birds of Prey

Family Cathartidae: American Vultures

- Turkey Vulture *(Cathartes aura)*

Family Accipitridae: Ospreys, Eagles, Harriers, and Hawks

- Osprey *(Pandion haliaetus)*
- Bald Eagle *(Haliaeetus leucocephalus)*
- Northern Harrier *(Circus cyaneus)*
- Sharp-shinned Hawk *(Accipiter striatus)*
- Cooper's Hawk *(Accipiter cooperii)*
- Northern Goshawk *(Accipiter gentilis)*
- Broad-winged Hawk *(Buteo platypterus)*
- Swainson's Hawk *(Buteo swainsoni)*
- Red-tailed Hawk *(Buteo jamaicensis)*
- Ferruginous Hawk *(Buteo regalis)*
- Rough-legged Hawk *(Buteo lagopus)*
- Golden Eagle *(Aquila chrysaetos)*

Family Falconidae: Falcons

- Eurasian Kestrel *(Falco tinnunculus)*
- American Kestrel *(Falco sparverius)*
- Merlin *(Falco columbarius)*
- Peregrine Falcon *(Falco peregrinus)*
- Gyrfalcon *(Falco rusticolus)*
- Prairie Falcon *(Falco mexicanus)*

Order STRIGIFORMES: Owls

Family Tytonidae: Barn Owls

- Barn Owl *(Tyto alba)*

Family Strigidae: Typical Owls

- Flammulated Owl *(Otus flammeolus)*
- Western Screech-Owl *(Otus kennicottii)*
- Great Horned Owl *(Bubo virginianus)*
- Snowy Owl *(Nyctea scandiaca)*
- Northern Hawk Owl *(Surnia ulula)*
- Northern Pygmy-Owl *(Glaucidium gnoma)*
- Burrowing Owl *(Athene cunicularia)*
- Spotted Owl *(Strix occidentalis)*
- Barred Owl *(Strix varia)*
- Great Gray Owl *(Strix nebulosa)*
- Long-eared Owl *(Asio otus)*
- Short-eared Owl *(Asio flammeus)*
- Boreal Owl *(Aegolius funereus)*
- Northern Saw-whet Owl *(Aegolius acadicus)*

GENERAL KEY TO BIRDS OF PREY OF BRITISH COLUMBIA

Eyes on side of head

Order Falconiformes
- hawks
- etc

Family Cathartidae
- vultures

Family Accipitridae
- hawks
- eagles
- etc.

Family Falconidae
- falcons

Eyes on front of head

Order Strigiformes
- owls

Family Tytonidae
- barn owls

Family Strigidae
- true owls

KEY TO ORDER FALCONIFORMES

Vultures, Osprey, Eagles, Harriers, Hawks, and Falcons

no feathers on head

Family Cathartidae
- vultures
- 1 species

Turkey Vulture

feathers on head

*no "tooth" on upper mandible**

Family Accipitridae
- ospreys
- eagles
- harriers
- hawks
- 12 species

"tooth" on upper mandible

Family Falconidae
- falcons
- 5 species

*a projection on the upper bill, located near the tip of all members of the family Falconidae

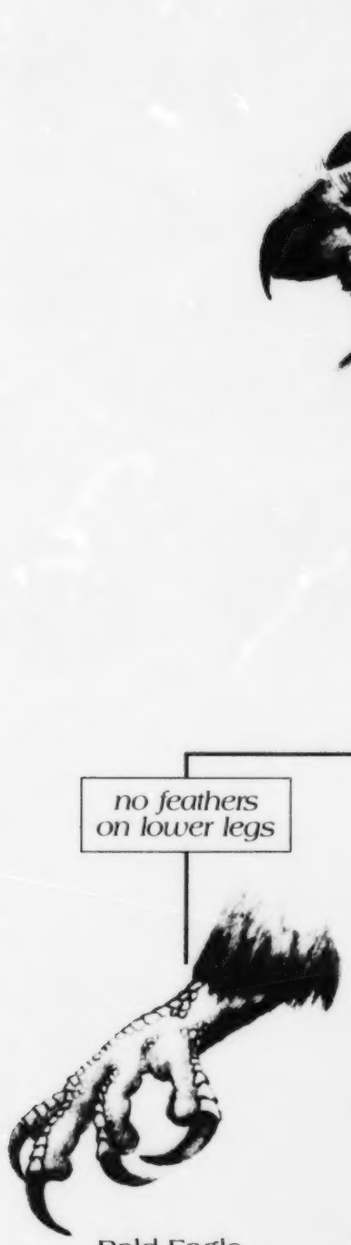
KEY TO FAMILY ACCIPITRIDAE

*facial disk around eyes**

Northern Harrier

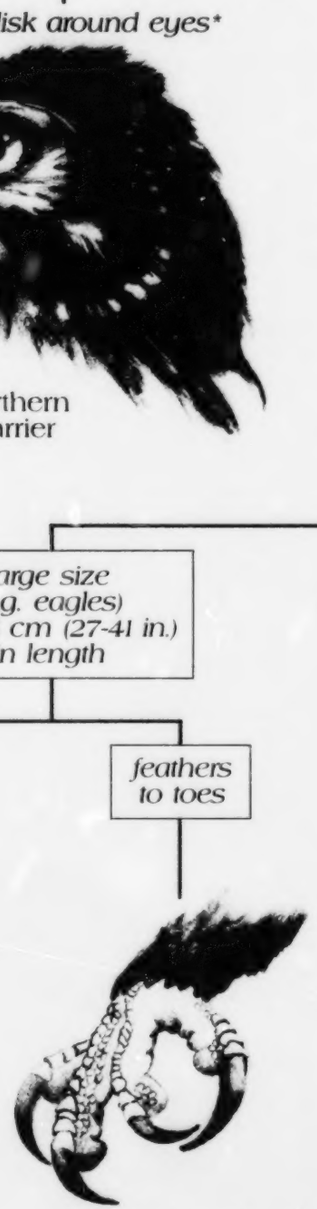
large size (e.g. eagles) 70-105 cm (27-41 in.) in length

no feathers on lower legs



Bald Eagle

feathers to toes



Golden Eagle

*densely packed feathers on the face with a definite pattern; used in prey location

no facial disk

small to medium size (e.g. hawks, etc.) 24-66 cm (9-26 in.) in length

all white breast and belly

Osprey

breast and belly with markings

continued on next page

KEY TO FAMILY ACCIPITRIDAE

breast and belly with markings

feathers to toes

black/dark belly

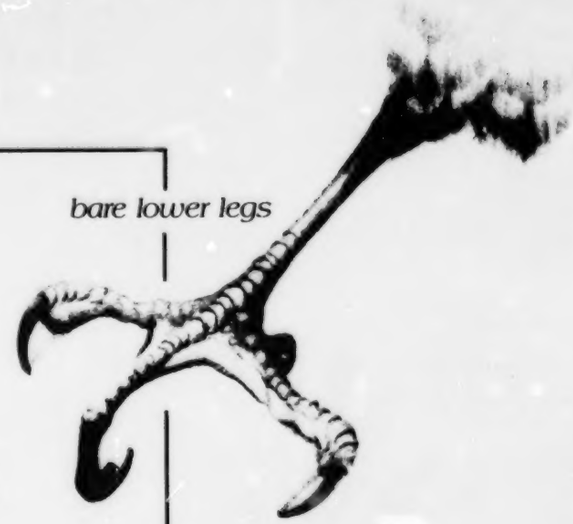
light belly few markings

Rough-legged Hawk

Ferruginous Hawk

(continued)

bare lower legs



long, narrow tail extends well past wing tips

short, broad tail extends to or just beyond wing tips

continued on next page

- *light eyebrow line*
- *length 46-62 cm (18-24 in.)*

- *rounded tip to tail*
- *wide white tip*

- *square tip of tail*
- *narrow white tip*

Northern Goshawk

Cooper's Hawk

Sharp-shinned Hawk

KEY TO FAMILY ACCIPITRIDAE (continued)

short, broad tail extends to or just beyond wing tips

*4 outer primary feathers emarginate**

Red-tailed Hawk

3 outer primary feathers emarginate

- *wing tips extend beyond tail 43-55 cm (17-22 in.) in length*

Swainson's Hawk

- *wing tips do not extend beyond tail smallest* Buteo *34-42 cm (13-17 in.) in length*

Broad-winged Hawk

*a narrowing of the web on one side (usually the outer) of the feathers towards the tip, producing a tapering effect

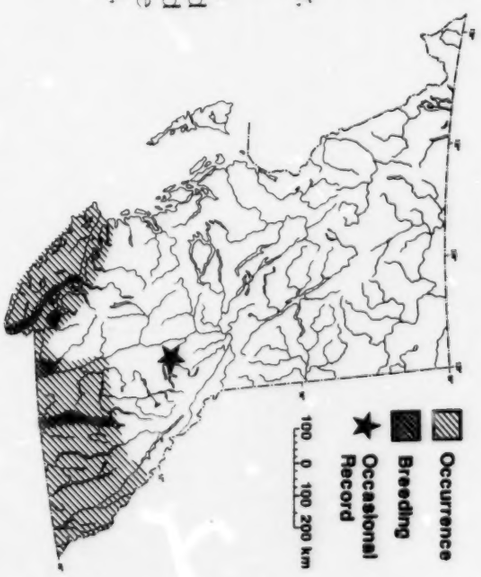
SPECIES NOTES FOR FAMILY CATHARTIDAE AND ACCIPITRIDAE

FAMILY CATHARTIDAE

Turkey Vulture
Cathartes aura

STATUS AND DISTRIBUTION: Rare to fairly common migrant and local summer visitant across southern parts of the province, including Vancouver Island. Very common autumn migrant on extreme southern Vancouver Island. In winter, very rare on the coast, casual in the interior. Breeds.

COMMENTS: Identification - A large raptor with blackish brown body and bare head, which is red in adults and dusky/dark in immatures. The centre of abundance is the Strait of Georgia, including the Gulf Islands. **Measurements: Length** - 62-72 cm (24-28 in.). **Weight** - 1.6-2.4 kg (3.5-5.3 lbs.).

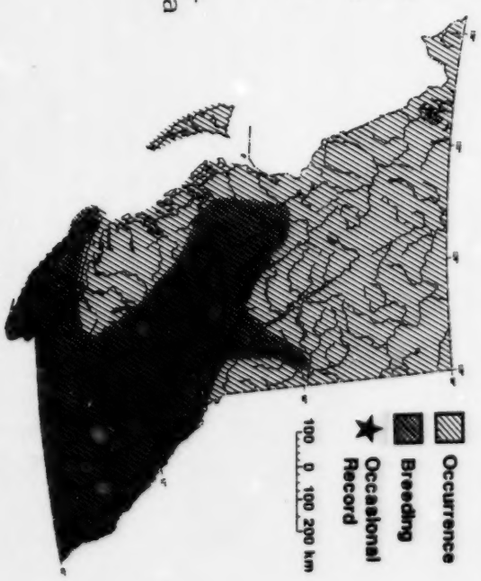


FAMILY ACCIPITRIDAE

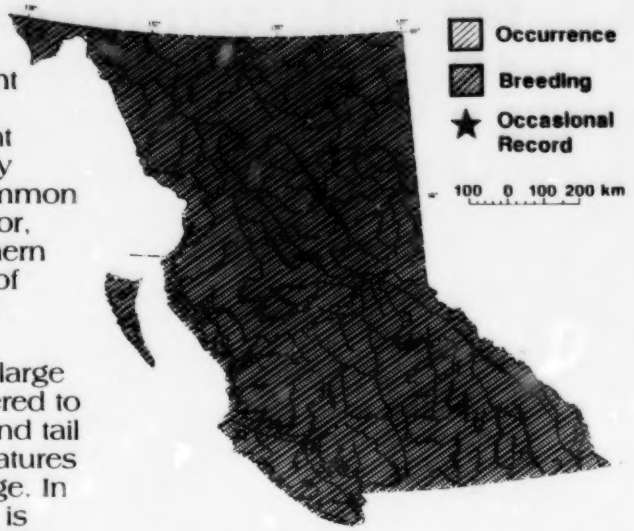
Osprey
Pandion haliaetus

STATUS AND DISTRIBUTION: Uncommon to fairly common migrant and summer visitant across the southern third of the province, rare north of latitude 56°N. Very rare on the Queen Charlotte Islands. In winter, very rare on the south coast, casual in the interior. Widespread breeder south of latitude 56°N, except the Queen Charlotte Islands.

COMMENTS: Identification - A long-winged raptor with no markings on a white belly and a dark line through the eye. Locally referred to as "fish hawk". **Measurements: Length** - 53-66 cm (21-26 in.). **Weight** - 1.0-1.8 kg (2.2-3.9 lbs.).



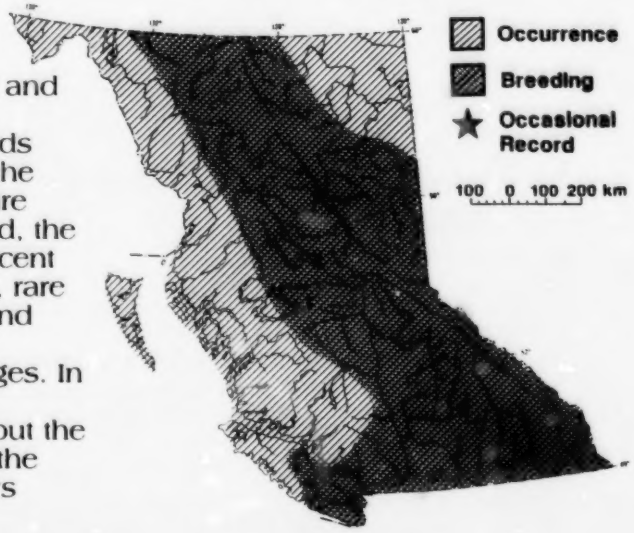
Bald Eagle
Haliaeetus leucocephalus



STATUS AND DISTRIBUTION: Uncommon to fairly common resident along the coast of Vancouver Island, Queen Charlotte Islands, and adjacent mainland; seasonally and locally very common to abundant. Rare to uncommon summer visitant in the northern interior, and uncommon resident in the southern interior, local in winter in the vicinity of ice-free rivers and lakes. Widespread breeder.

COMMENTS: Identification - A very large raptor whose legs are not fully feathered to the toes. Adults have a white head and tail and uniform dark brown body. Immatures take four years to show adult plumage. In the intervening period, their plumage is highly variable. **Measurements; Length** - Male 76.2-86.4 cm (30-34 in.), Female 88.9-94.0 cm) (35-37 in.). **Weight** - Male 3,628-4,808 g (8.0-10.6 lbs.), Female 4,626-6,395 g (10.2-14.1 lbs.).

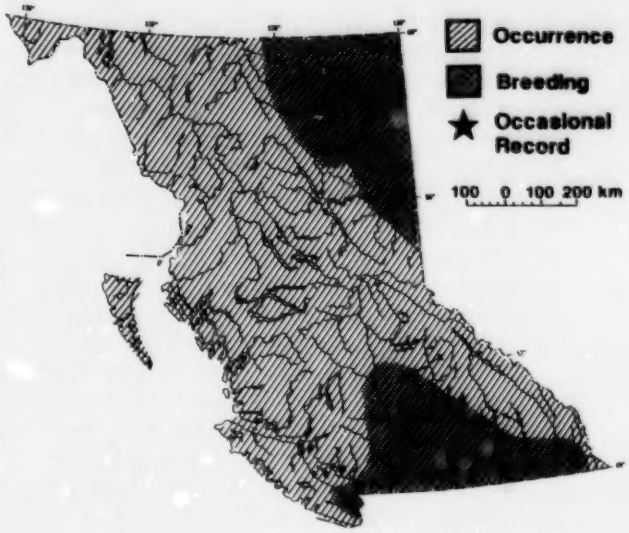
Northern Harrier
Circus cyaneus



STATUS AND DISTRIBUTION: Uncommon to fairly common spring and autumn migrant on southeastern Vancouver Island, the Fraser Lowlands and generally throughout the rest of the province east of the coast ranges. Rare migrant on northern Vancouver Island, the Queen Charlotte Islands and the adjacent northern mainland coast. In summer, rare on southeastern Vancouver Island, and uncommon throughout the Fraser Lowlands and east of the Coast Ranges. In winter, uncommon on southeastern Vancouver Island, common throughout the Fraser Lowlands and uncommon in the southern interior except the Kootenays where it is rare. Local breeder.

COMMENTS: Identification - A long-winged bare-legged raptor with an owl-like facial disk and white rump patch. Males are generally gray, females brown above and light below, and immatures are rusty overall. It was previously known as the Marsh Hawk. **Measurements: Length** - Male 41-45 cm (16-18 in.), Female 45-50 cm (18-20 in.). **Weight** - Male 290-390 g (10-14 oz.), Female 390-600 g (14-21 oz.).

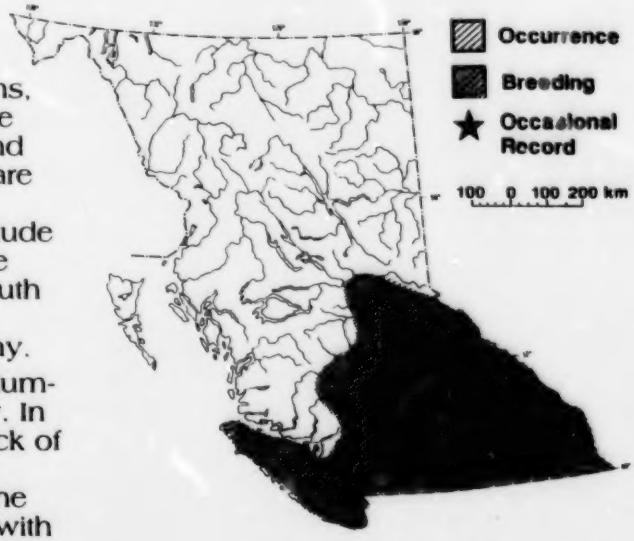
Sharp-shinned Hawk
Accipiter striatus



STATUS AND DISTRIBUTION: Common to very common spring and autumn migrant throughout most of the province. Uncommon in summer. In winter, uncommon in coastal areas and the southern interior; casual in the northern interior. Widespread breeder.

COMMENTS: Identification - A small hawk about the size of an American Robin. In adults, crown and back of head are uniform in colour, upperparts are blue-gray and underparts are barred with fine rufous lines. Eyes are red. Immatures are brown with a yellow eye. Both age classes show a square tip to the tail, with a narrow white terminal band. The three species of Accipiters are short-winged, long-tailed, forest hawks and locally referred to as "chicken hawks." **Measurements: Length** - Male 24-27 cm (9-11 in.), Female 29-34 cm (11-13 in.). **Weight** - Male 87-114 g (3-4 oz.), Female 150-218 g (5-8 oz.).

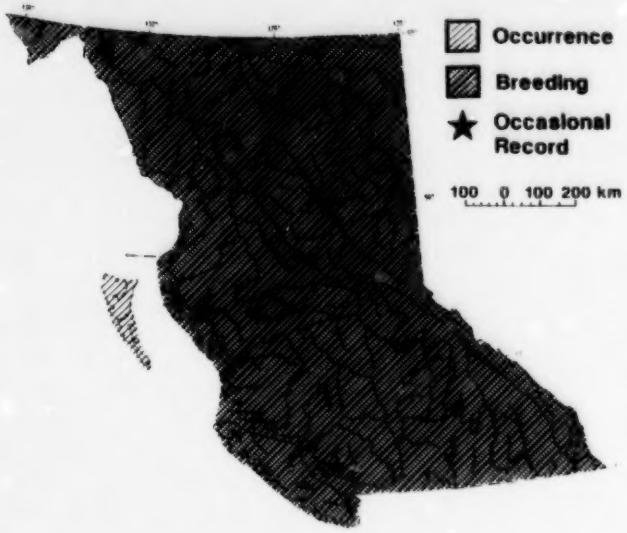
Cooper's Hawk
Accipiter cooperii



STATUS AND DISTRIBUTION: Uncommon resident, at low elevations, in southeastern Vancouver Island, the Gulf Islands, the Fraser Lowlands, and the Okanagan valley. Elsewhere, a rare to uncommon migrant and summer visitant, casual in winter south of latitude 52°N; rare, becoming very rare to the north. Widespread breeder on the south coast and southern interior; rarer elsewhere including the east Kootenay.

COMMENTS: Identification - A medium-sized hawk, about the size of a crow. In adults, crown is darker gray than back of head, upperparts are blue-gray and underparts are barred with rufous. The eye is red. Immatures are brownish with a yellowish eye. Both age classes show a rounded tip to the tail with a broad, white terminal band. **Measurements: Length** - Male 37-41 cm (14-16 in.), Female 42-47 cm (16-19 in.). **Weight** - Male 302-402 g (10-14 oz.), Female 479-678 g (17-24 oz.).

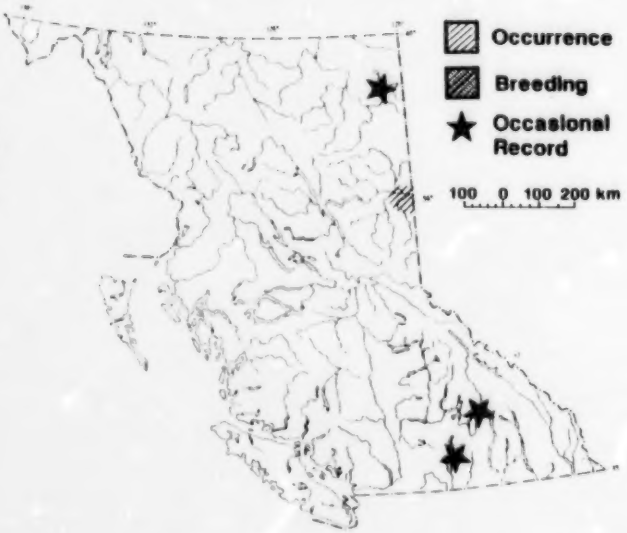
Northern Goshawk
Accipiter gentilis



STATUS AND DISTRIBUTION: Rare to uncommon resident throughout the province including Vancouver Island and the Queen Charlotte Islands. Irregular migrant, rare to uncommon in spring, rare to fairly common in autumn. Widespread breeder.

COMMENTS: Identification - The largest Accipiter, about the size of a Common Raven. Adults are all gray, immatures are generally brown above and heavily streaked below. Both age classes show a distinctive light/white eyebrow line. Eyes in adults are reddish; immatures have yellow-brown eyes. **Measurements: Length** - Male 46-51 cm (18-20 in.), Female 53-62 cm (21-24 in.). **Weight** - Male 677-1014 g (24-36 oz.), Female 758-1214 g (26-43 oz.).

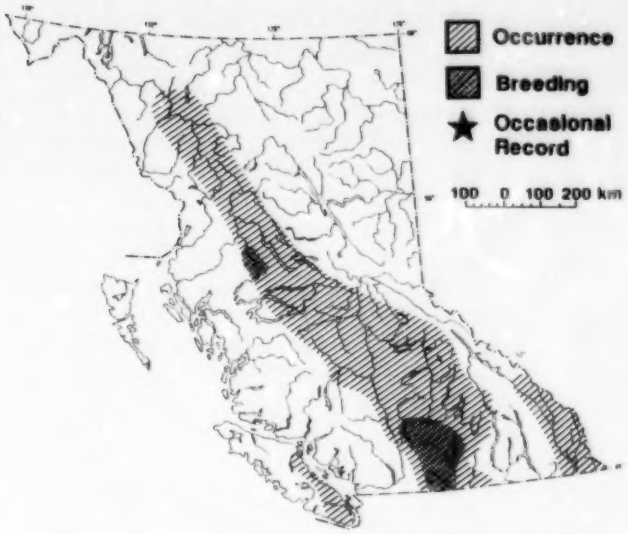
Broad-winged Hawk
Buteo platypterus



STATUS AND DISTRIBUTION: Rare summer visitant to the Peace Lowlands, casual elsewhere in the interior. Probably breeds.

COMMENTS: Identification - A small raptor, slightly smaller than a crow. Adults are dark brown above, barred with rufous below and have two wide white bands on a dark brown tail. Immatures are dark brown above, heavily streaked below, and the light brown tail has dark brown bands. The wing tips do not extend beyond the tail when at rest. Hawks of the genus *Buteo* have broad wings, short to medium length tails and often soar. Many colour phases are present in some species. **Measurements: Length** - Male 34.3-41.9 cm (13.5-16.5 in.), Female 38.1-47.0 cm (15.0-18.5 in.). **Weight** - Male 310-400 g (10.9-14.1 oz.), Female 389-559 g (13.7-19.7 oz.).

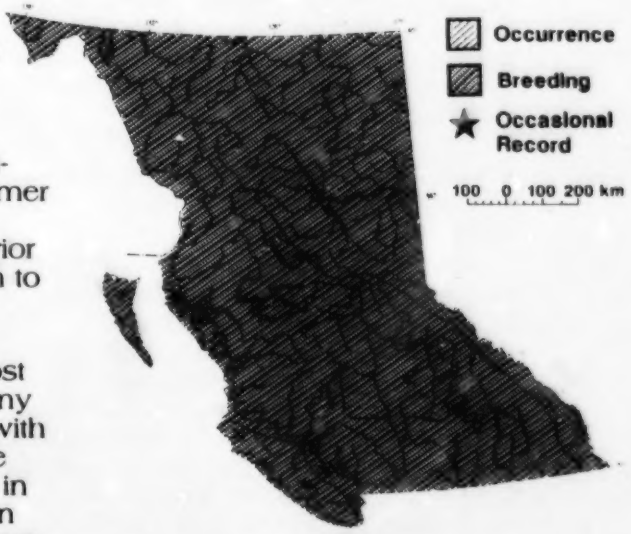
Swainson's Hawk
Buteo swainsoni



STATUS AND DISTRIBUTION: Uncommon to fairly common migrant and summer visitant in the Thompson-Okanagan Plateau region, becoming rare through the Chilcotin-Cariboo to very rare further north. Very rare migrant on southeastern Vancouver Island and in the east Kootenays. Local breeder.

COMMENTS: Identification - A medium-sized hawk with many colour phases, from light to dark. Many gradations occur in the province. At rest, wing tips reach tail tip. The outer three primary (flight) feathers are emarginate. "Light" birds have a white throat patch and two-toned appearance to underwings; "dark" birds have a pale area under the tail. **Measurements: Length** - Male 47.7-52.3 cm (18.8-20.6 in.), Female 48-55.9 cm (18.9-22 in.). **Weight** - Male 683-936 g (24.1-33.0 oz.), Female 937-1,367 g (33.1-48.2 oz.).

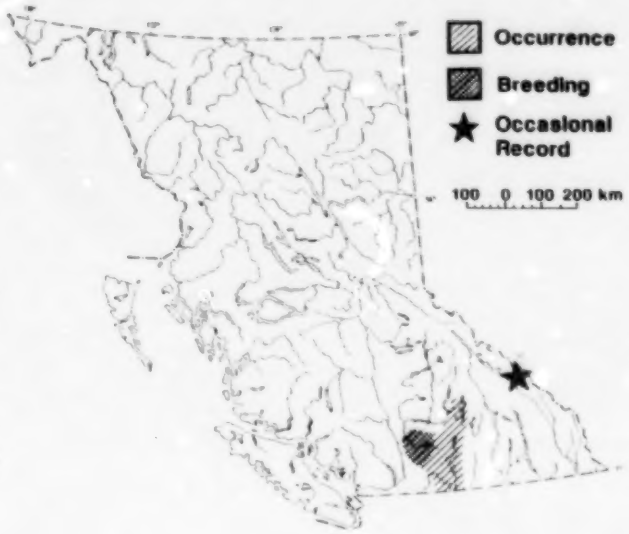
Red-tailed Hawk
Buteo jamaicensis



STATUS AND DISTRIBUTION: Uncommon resident along the coast, including Vancouver Island and the Queen Charlotte Islands, and in the Okanagan, Shuswap and South Thompson regions of the Thompson-Okanagan Plateau. Uncommon summer visitant throughout the rest of the province. Casual in winter in the interior north of latitude 51°N. Fairly common to common migrant throughout the province. Widespread breeder.

COMMENTS: Identification - Our most common and widespread *Buteo*. Many light and dark colour phases occur, with various combinations, throughout the province. Adults show brick-red tails in "light" birds and mottled white tails in "dark" birds. Immature "light" birds are dark brown above, light below, with a distinct belly band. The outer four primary (flight) feathers are emarginate. **Measurements: Length** - Male 48.3-55.9 cm (19-22 in.), Female 53.3-61 cm (21-24 in.). **Weight** - Male 698-1,296 g (1.5-2.8 lbs.), Female 904-1,723 g (2.0-3.8 lbs.).

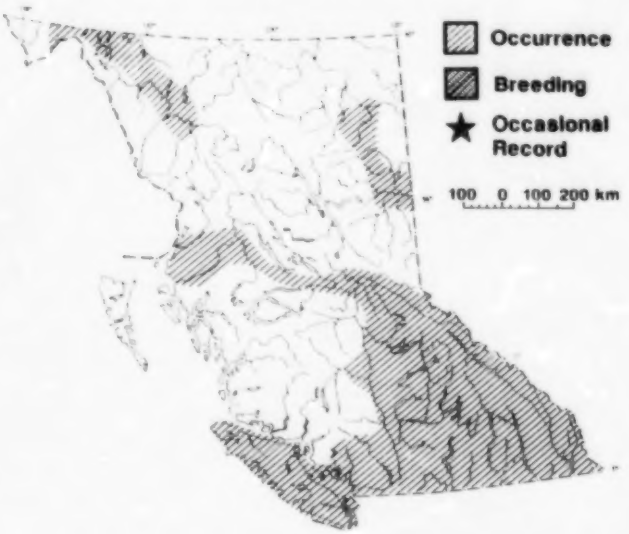
Ferruginous Hawk
Buteo regalis



STATUS AND DISTRIBUTION: Very rare summer visitant to the central southern interior. Very local breeder.

COMMENTS: Identification - A very large hawk which visits the province from June to August. Adults have an unbanded tail and dark rufous to chestnut-coloured feathers on the legs. Legs are feathered to the toes. Immatures lack colourful leg feathers but prominently show large white base to top of tail. There are only 17 records for the province, all-time. **Measurements: Length** - Male 56.6-58.4 cm (22.3-23.0 in.), Female 60.5-63.0 cm (23.8-24.8 in.). **Weight** - Male 1,040-1,059 g (2.3-2.4 lbs.), Females 1,228-1,237 g (2.7-2.8 lbs.).

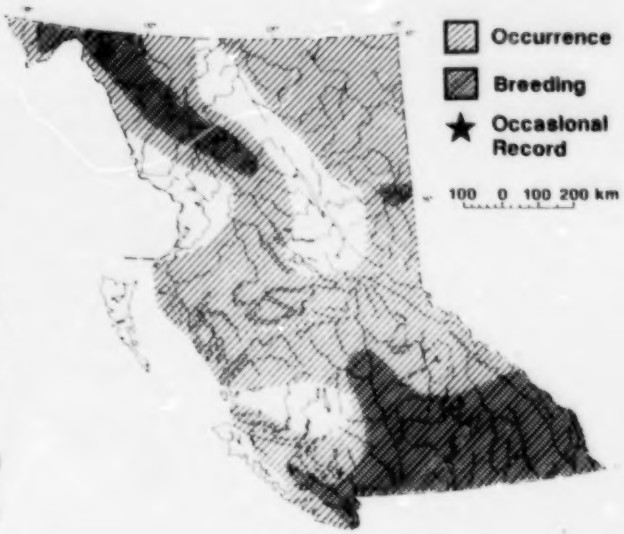
Rough-legged Hawk
Buteo lagopus



STATUS AND DISTRIBUTION: Generally a migrant and winter visitant throughout the province east of the Coast Ranges, as well as southeastern Vancouver Island and the Fraser Lowlands. On the south coast, rare to uncommon in winter on southern Vancouver Island and uncommon to fairly common through the Fraser Lowlands. Casual in summer. In the interior, generally rare but locally uncommon in winter in the northern Okanagan valley, the Kamloops-Douglas Lake region and the Creston valley. Very rare in summer.

COMMENTS: Identification - A large *Buteo* with a long tail and leg feathers to the toes. Other distinguishing features include a generally light head, dark wrist patches under the wings, white area at base of the tail and broad terminal tail band edged with white. There are light and dark colour phases. In dark-plumaged birds there is often a small white patch on the back of the head. **Measurements: Length** - Male 49.5-55.9 cm (19.5-22 in.), Female 54.6-59.7 cm (21.5-23.5 in.). **Weight** - Male 779-1,176 g (1.7-2.6 lbs.), Female 1,033-1,400 g (2.3-3.1 lbs.).

Golden Eagle
Aquila chrysaetos



STATUS AND DISTRIBUTION: Rare to uncommon resident in mountains and hilly country across southern British Columbia. Uncommon migrant and summer visitant in the interior north of latitude 52°N. Very rare in winter in the Peace Lowlands; casual elsewhere in the north. Breeds.

COMMENTS: Identification - A very large raptor whose legs are feathered to the toes. Adults and immatures have a golden or yellowish colour on the crown and back of the head. Their bodies are uniform dark brown, but tail patterns vary between age classes. Immatures show a large white area at the base of tail. Greatest densities in the province are found from Dease Lake northward into the Yukon. **Measurements: Length** - Male 76.2-88.9 cm (30-35 in.), Female 88.9-94.1 cm (35-41 in.). **Weight** - Male 2,950-4,300 g (6.5-9.5 lbs.), Female 3,630-5,900 g (8.0-13.0 lbs.).

KEY TO FAMILY

obvious malar or "moustache" stripe

double malar stripe

single malar stripe

American Kestrel

broad black malar stripe

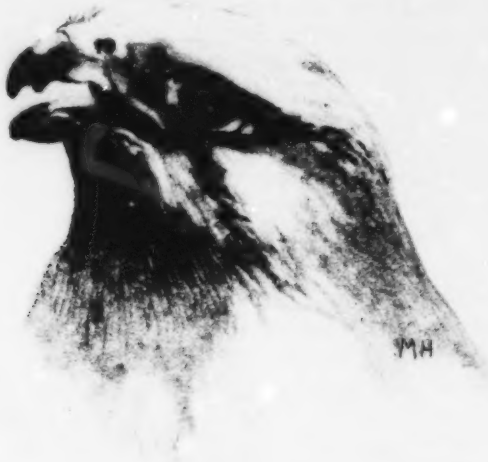
Peregrine Falcon

narrow brown malar stripe

Prairie Falcon

FALCONIDAE

faint malar or "moustache" stripe



small size
24-30 cm (9-12 in.)
in length

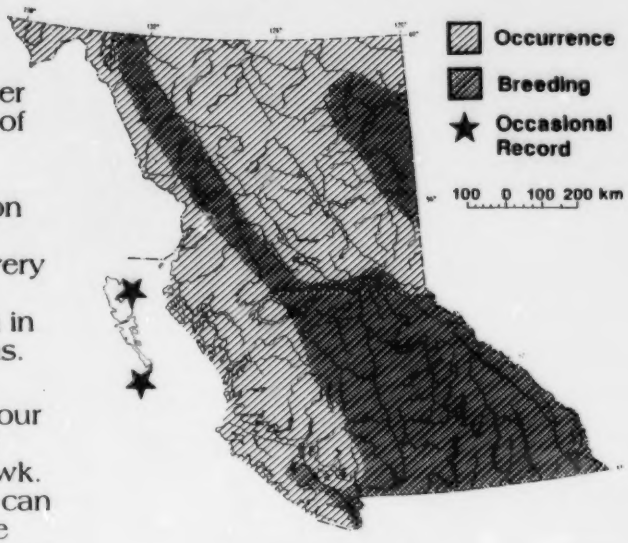
Merlin

large size
50-60 cm (19-24 in.)
in length

Gyrfalcon

SPECIES NOTES FOR FAMILY FALCONIDAE

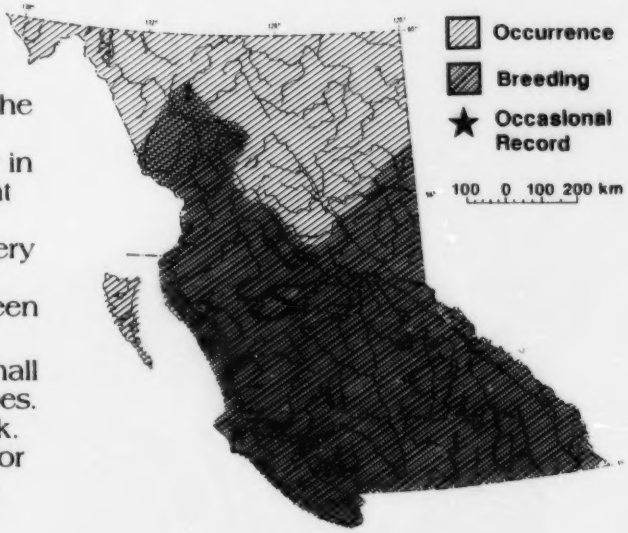
American Kestrel
Falco sparverius



STATUS AND DISTRIBUTION: Uncommon to fairly common summer visitant throughout the province east of the Coast Ranges, on southern Vancouver Island and in the Fraser Lowlands. Fairly common to common migrant, with the exception of the northern mainland coast where it is very rare; casual on the Queen Charlotte Islands. In winter, rare to uncommon in the south, casual in the northern areas. Widespread breeder.

COMMENTS: Identification - This is our smallest and most colourful falcon. It was formerly known as Sparrow Hawk. Males and females of all age classes can be identified by two black moustache stripes. Each also has a pair of false eyes on the back of the head. Immature males have a heavily streaked breast, rather than a rufous breast of adults. **Measurements: Length** - Male 22-26 cm (8-10 in.), Female 23-27 cm (9-11 in.). **Weight** - Male 97-120 g (3.4-4.5 oz.), Female 102-150 g (3.6-5.3 oz.).

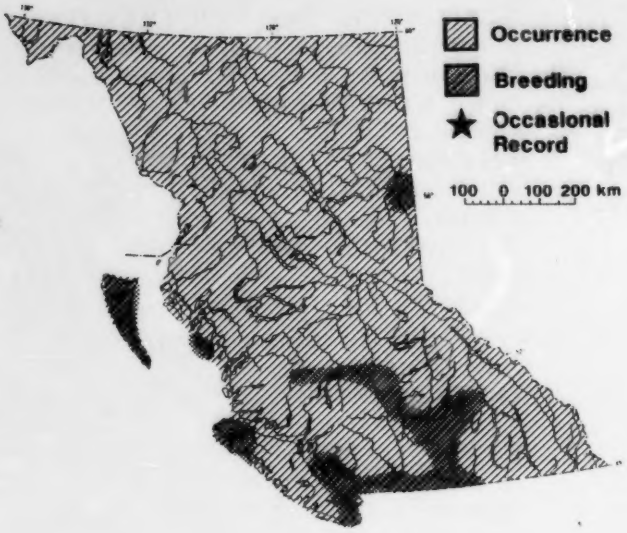
Merlin
Falco columbarius



STATUS AND DISTRIBUTION: Rare resident across southern portions of the province below latitude 51°N. Rare summer visitant and casual in winter in the north. Rare to uncommon migrant throughout the province, except the Queen Charlotte Islands where it is very rare in autumn. Widespread breeder; breeding is not reported from the Queen Charlotte Islands.

COMMENTS: Identification - This small falcon lacks obvious moustache stripes. It was formly known as Pigeon Hawk. Colours vary from very dark overall for the coastal race (both sexes) to birds with blue-gray back (male) or brown back (female) and boldly streaked underparts for the interior race. **Measurements: Length** - Male 24-27 cm (9-11 in.), Female 28-30 cm (11-12 in.). **Weight** - Male 129-187 g (4.5-6.6 oz.), Female 182-236 g (6.4.-8.3 oz.).

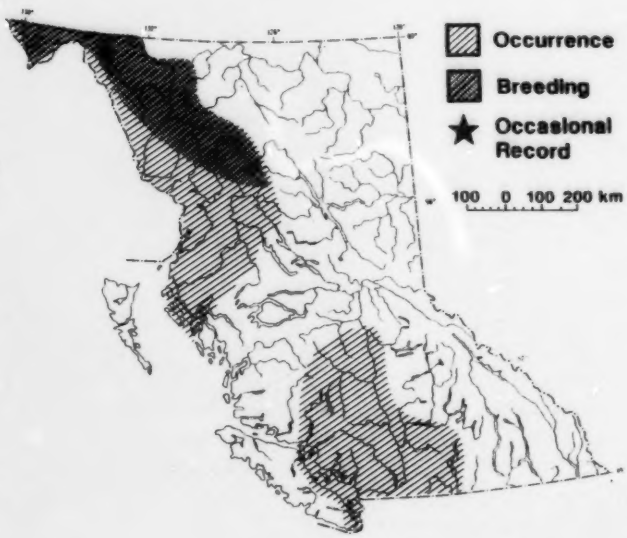
Peregrine Falcon
Falco peregrinus



STATUS AND DISTRIBUTION: Uncommon migrant, but mostly an uncommon resident along the coast where it is more evident in summer in northern areas and in winter in southern areas. Widespread coastal breeder. Rare resident in the Okanagan valley. Very rare elsewhere in the interior; a local breeder in northern areas.

COMMENTS: Identification - This medium-sized falcon has a diagnostic, broad, dark moustache stripe in all age groups. Two of the three North American forms occur regularly in British Columbia. The coastal form, known as "Peale's" Peregrine Falcon, is the largest and darkest. The breast has well-defined dark streaks. The "Continental" Peregrine Falcon is lighter; adults have rusty red on the breast and immatures have no pale edges to feathers on the back. **Measurements: Length** - Male 37-41 cm (14-16 in.), Female 42-46 cm (16-18 in.). **Weight** - Male 453-685 g (1.0-1.5 lbs.), Female 719-952 g (1.6-2.1 lbs.).

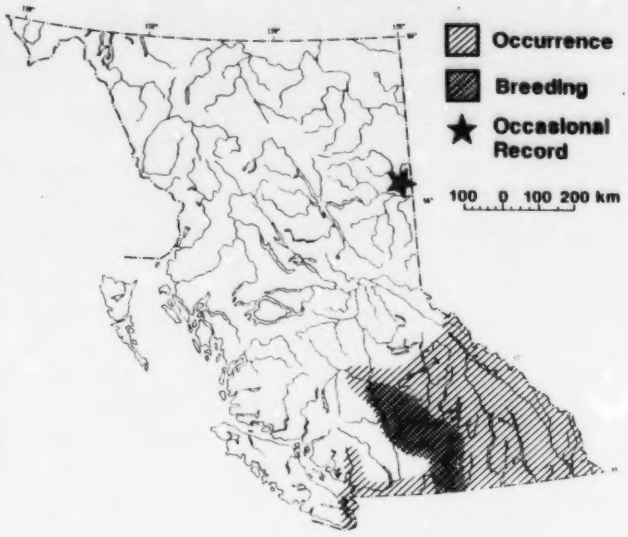
Gyrfalcon
Falco rusticolus



STATUS AND DISTRIBUTION: Uncommon summer visitant and breeder along high mountains in the extreme northwest. Rare winter visitant to southeastern Vancouver Island and the Fraser Lowlands. Very rare in winter in the central-southern interior. Casual in winter in the northern interior.

COMMENTS: Identification - This is the largest falcon, slightly larger than a Common Raven, with a faint moustache stripe. There are three colour phases: white, gray, and dark. The gray phase is commonest in British Columbia. The underwing appears to be two-toned. Immatures have blue-gray bill and legs. **Measurements: Length** - Male 50-54 cm (19-21 in.), Female 57-61 cm (22-24 in.). **Weight** - Male 1000-1300 g (2.2-2.9 lbs.), Female 1400-2100 g (3.1-4.6 lbs.).

Prairie Falcon
Falco mexicanus



STATUS AND DISTRIBUTION: Rare resident in the Okanagan valley. Rare late summer visitant to alpine areas of the Cascade Mountains, very rare elsewhere in the southern interior. Very rare transient to the southeastern portion of the province. Casual in the west Kootenay and on the southwest coast including southern Vancouver Island. Very rare local breeder.

COMMENTS: Identification - This is a medium-size falcon with a narrow brown moustache stripe. Adults and immatures are generally sandy brown in colour with a dark "armpit" underneath the wings. Adults have a light to white area between the eye and dark brown ear patch. Adults have yellowish legs, immature legs are grayish. **Measurements: Length** - Male 37-40 cm (14-16 in.), Female 42-47 cm (16-18 in.). **Weight** - Male 420-635 g (0.9-1.4 lbs.), Female 675-975 g (1.5-2.1 lbs.).

KEY TO ORDER STRIGIFORMES

Owls

Heart-shaped facial disk

Family Tytonidae
• barn owls

Rounded facial disk

Family Strigidae
• true owls

KEY TO FAMILY

Owls

*with head tufts**

tufts outside eyes (corner of head)

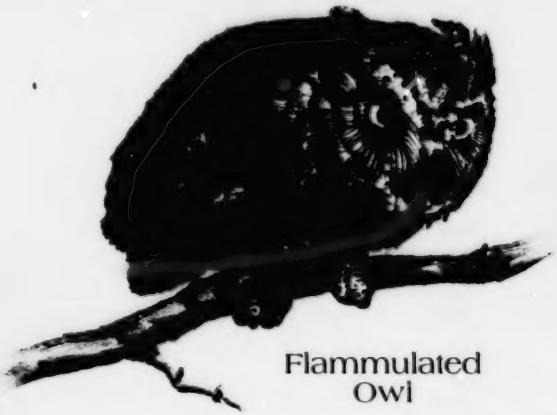
very large length 46-65 cm (18-26 in.)

medium length 18-28 cm (7-11 in.)

small length 15-19 cm (6-7.5 in.)

Great Horned Owl

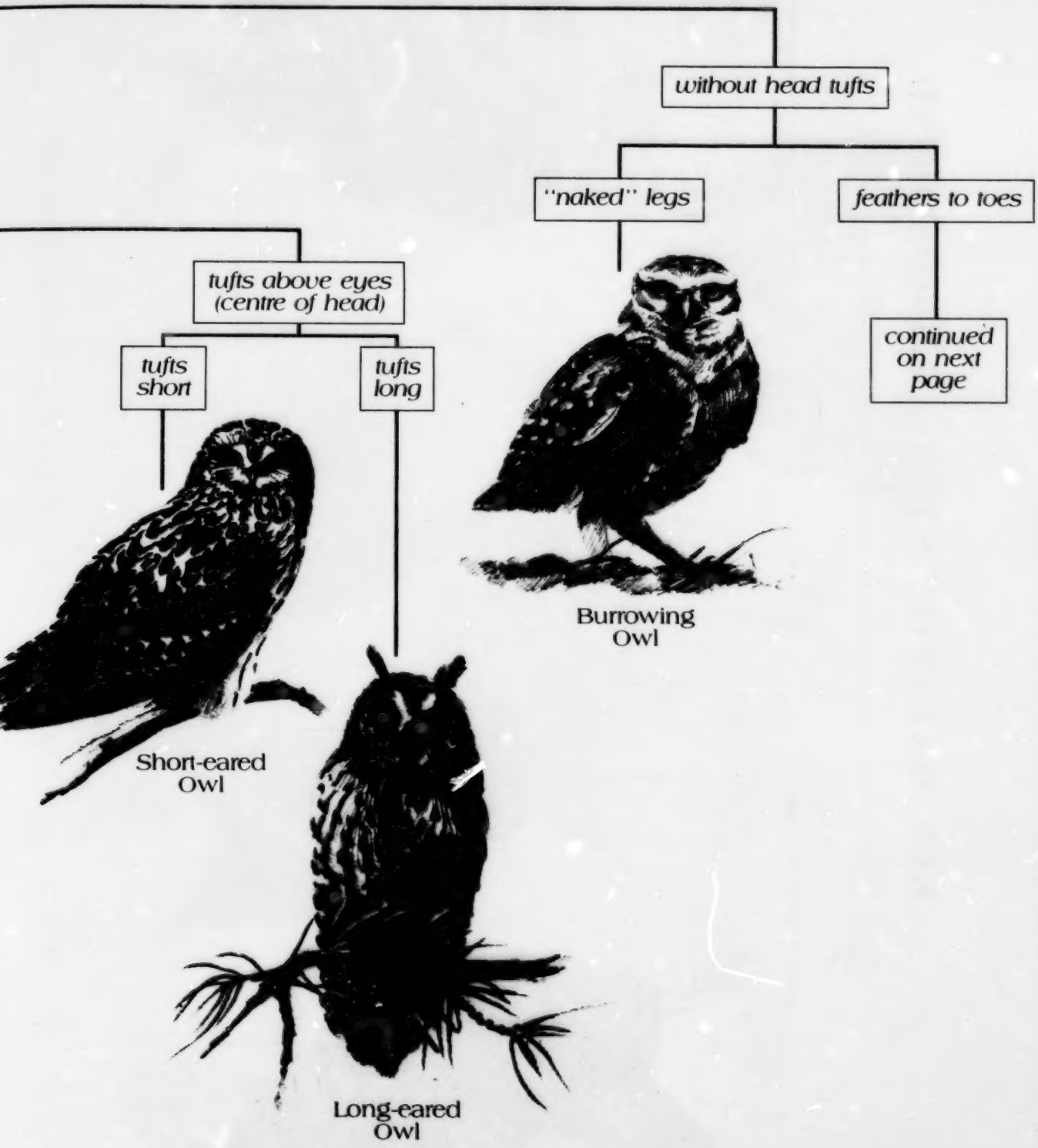
Western Screech-Owl



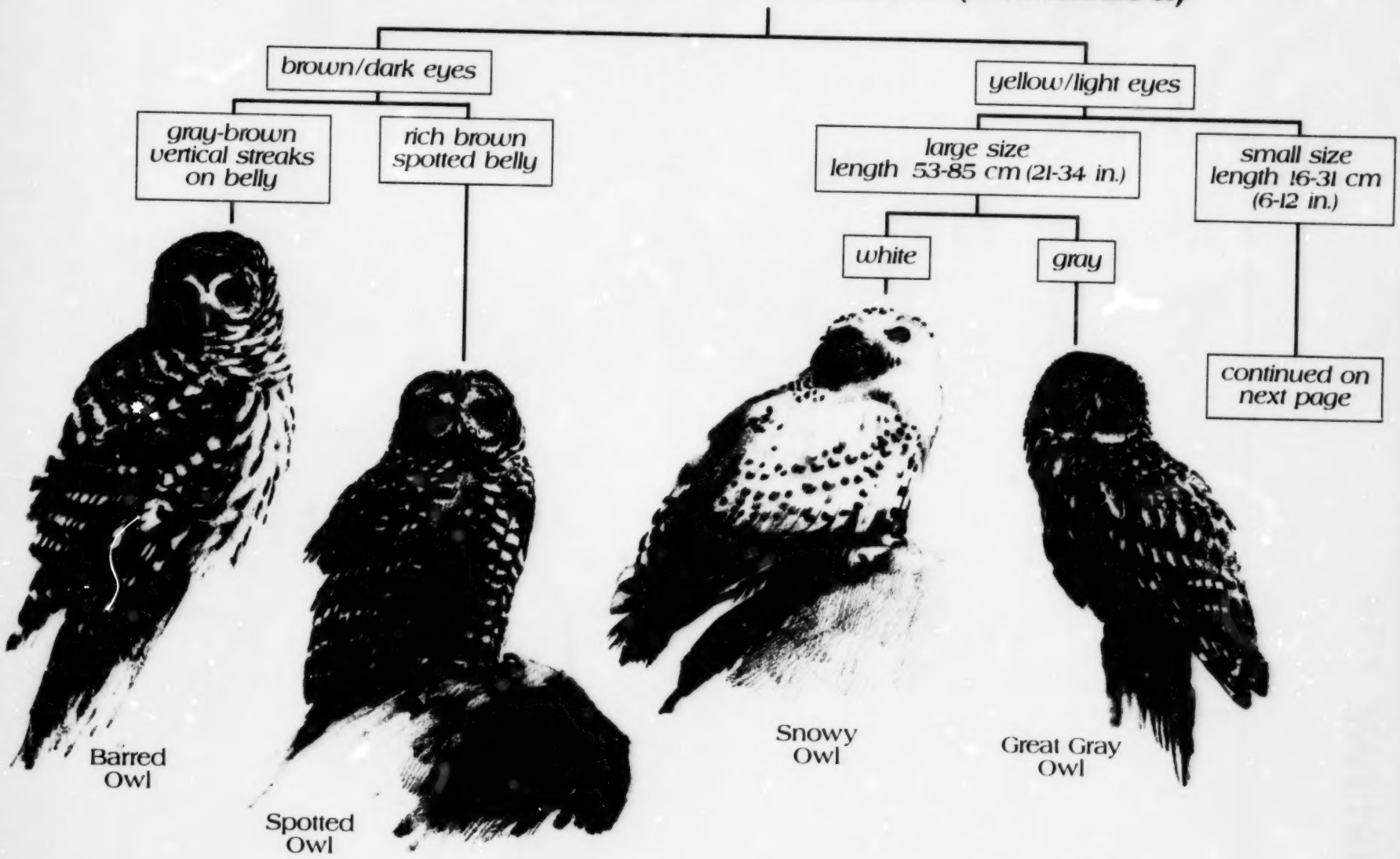
Flammulated Owl

*feathers on the head that give the bird a "horned" effect

STRIGIDAE


without head tufts
"naked" legs
feathers to toes
continued on next page
tufts above eyes (centre of head)
tufts short
tufts long
Burrowing Owl
Short-eared Owl
Long-eared Owl

KEY TO FAMILY STRIGIDAE (continued)



KEY TO FAMILY STRIGIDAE (continued)

tail 15 cm (6 in.) or longer*

tail 12.5 cm (5 in.) or shorter

2 black patches on back of head

yellow bill spots on forehead

dark bill streaks on forehead

Northern Hawk Owl

Northern Pygmy-Owl

Boreal Owl

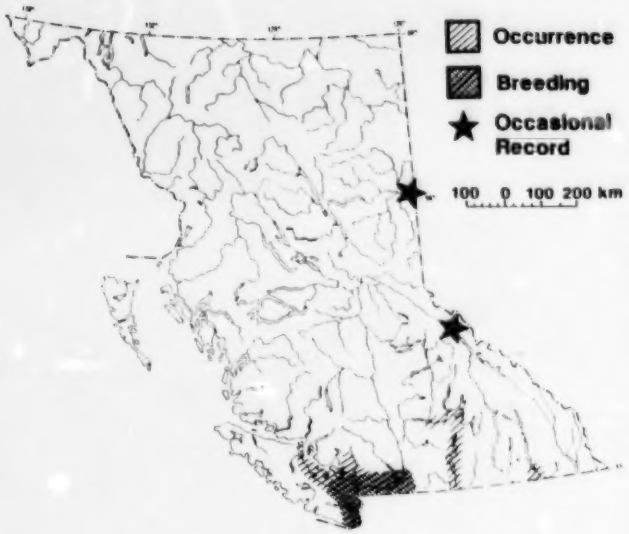
Northern Saw-whet Owl

*measured from base of tail at body to tip of longest tail feather

SPECIES NOTES FOR FAMILY TYTONIDAE AND STRIGIDAE

FAMILY TYTONIDAE

Barn Owl
Tyto alba

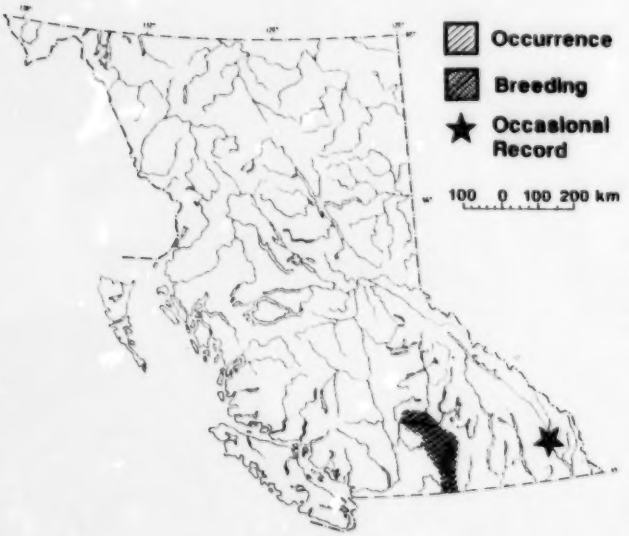


STATUS AND DISTRIBUTION: Rare resident on southeastern Vancouver Island, very rare north to Campbell River and on the Gulf Islands. Uncommon resident throughout the Fraser Lowlands to Hope. Very rare in the central-southern interior; accidental elsewhere. Widespread breeder throughout most of its coastal range.

COMMENTS: **Identification** - This nocturnal owl is best identified by its white underparts which are sprinkled with small dark spots. It has long legs, white underwings, and a heart-shaped face. The eyes are small and dark brown. The back is orange-brown. **Measurements: Length** - Male 36-49 cm (14.2-19.1 in.), Female 39-54 cm (15.2-21.2 in.). **Weight** - Male 31-51 g (10.9-17.8 oz.), Female 38-57 g (13.4-20.1 oz.).

FAMILY STRIGIDAE

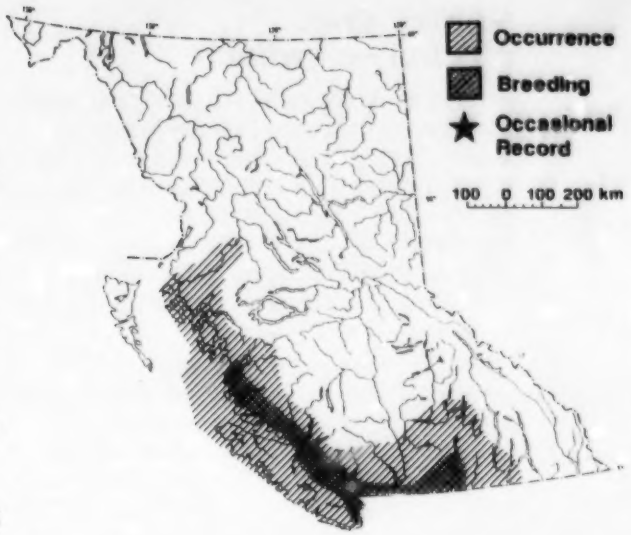
Flammulated Owl
Otus flammeolus



STATUS AND DISTRIBUTION: Uncommon summer visitant in the Okanagan valley and Thompson Basin. Accidental in the east Kootenay. Breeds.

COMMENTS: **Identification** - This is the only tiny owl with dark eyes and tiny ear tufts. The facial disk and back show rufous edges. **Measurements: Length** - Male 15-16.5 cm (5.9-6.5 in.), Female 16.4-19 cm (6.5-7.4 in.) **Weight** - Male 11.4-14.3 g (4.0-5.0 oz.), Female 12-15 g (4.3-5.2 oz.).

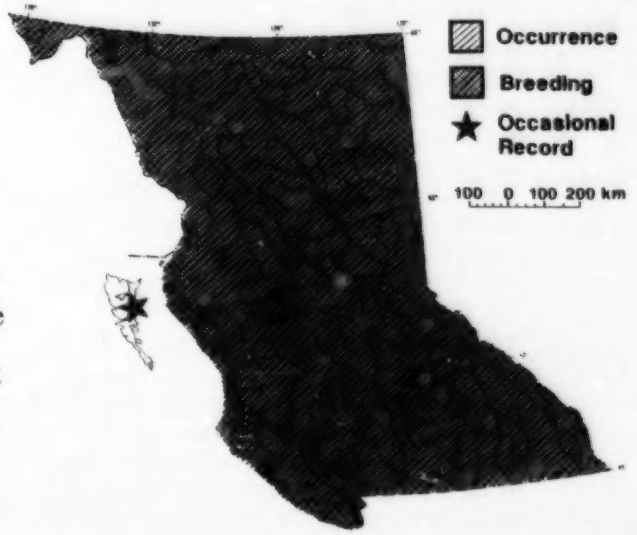
Western Screech-Owl
Otus kennicottii



STATUS AND DISTRIBUTION: Uncommon to fairly common resident on the south coast including Vancouver Island. Probably rare to uncommon resident on the northern mainland coast. Absent from the Queen Charlotte Islands. Rare to uncommon local resident in the central-southern interior; very rare in the west and the east Kootenays. Breeds.

COMMENTS: Identification - A small owl with small, widely spaced ear tufts situated outside the eyes. Generally brown-gray body with dark vertical streaks on breast. **Measurements: Length** - Male 18.5-24.5 cm (7.3-9.6 in.), Female 20-28 cm (8.0-10.9 in.). **Weight** - Male 175-214 g (6.2-7.6 oz.), Female 185-224 g (6.5-7.9 oz.).

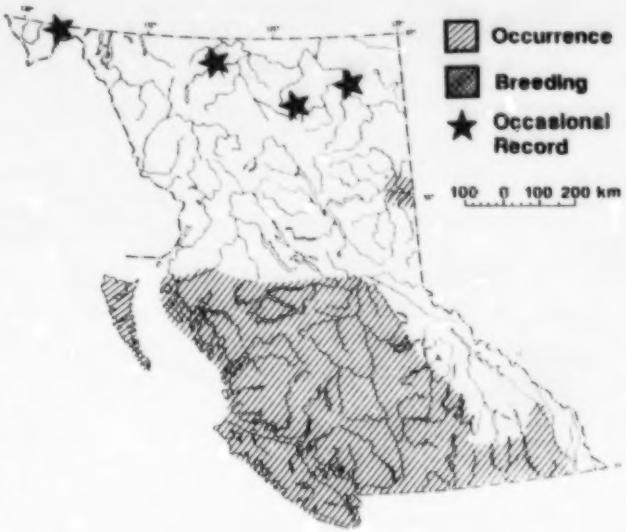
Great Horned Owl
Bubo virginianus



STATUS AND DISTRIBUTION: Uncommon to fairly common resident throughout the province, except the Queen Charlotte Islands, where it is casual. Widespread breeder.

COMMENTS: Identification - A large owl with long ear tufts on the outside of yellow eyes. The white throat patch is characteristic. Generally dark to light brown body with darker brown horizontal bars on underparts. **Measurements: Length** - Male 46-60 cm (18.4-23.7 in.), Female 55-65 cm (21.6-25.7 in.). **Weight** - Male 1383-1691 g (48.4-59.2 oz.), Female 1454-1876 g (50.9-65.7 oz.).

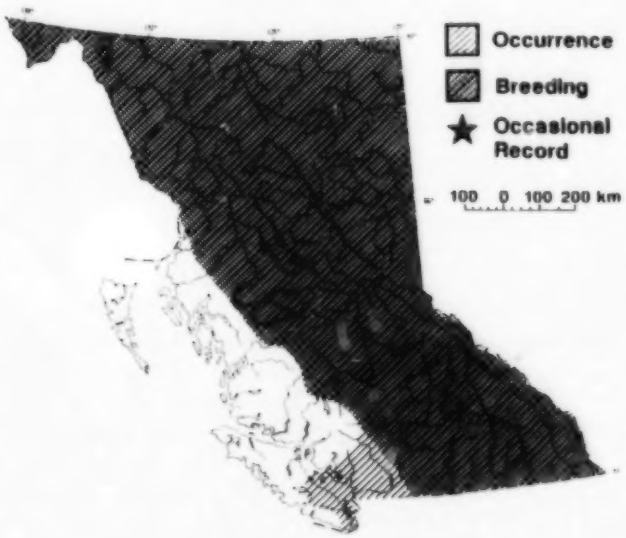
Snowy Owl
Nyctea scandiaca



STATUS AND DISTRIBUTION: Rare to fairly common, but irregular, winter visitant on the coast; rare to uncommon in the interior. During years of irruptions, can be very common on the extreme southwest mainland coast, fairly common in the northern interior and uncommon in the southern interior.

COMMENTS: Identification - The only owl that is mostly all white. It is large with yellow eyes and no noticable ear tufts. Plumage varies from nearly pure white to white with heavy dark barring. Males tend to be lighter in colour than females or immatures. **Measurements: Length** - Male 53-71 cm (20.9-27.9 in.), Female 63-77 cm (24.8-30.2 in.). **Weight** - Male 1448-1840 g (50.7-64.4 oz.), Female 1593-2002 g (55.8-70.1 oz.).

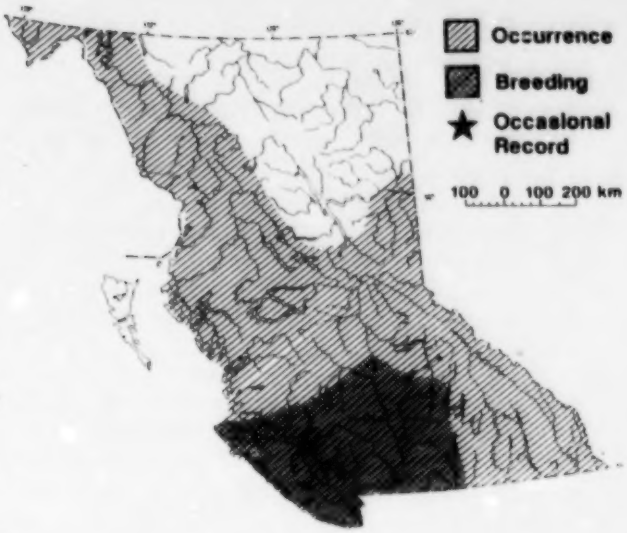
Northern Hawk Owl
Surnia ulula



STATUS AND DISTRIBUTION: Uncommon resident in the northern interior, probably local and rare resident at higher elevations in the southern interior. Also irregular transient and very rare winter visitant in the south. Casual on the northern mainland coast, very rare on the southwest coast including southern Vancouver Island. Breeds.

COMMENTS: Identification - A medium-sized owl with a long tail and sharply barred underparts. Eyes and bill are yellow. There are no head tufts. The facial disk is edged in black. **Measurements: Length** - Male 36-42 cm (14.3-16.7 in.), Female 40-45 cm (15.8-17.6 in.). **Weight** - Male 194-266 g (6.8-9.3 oz.), Female 202-273 g (7.1-9.6 oz.).

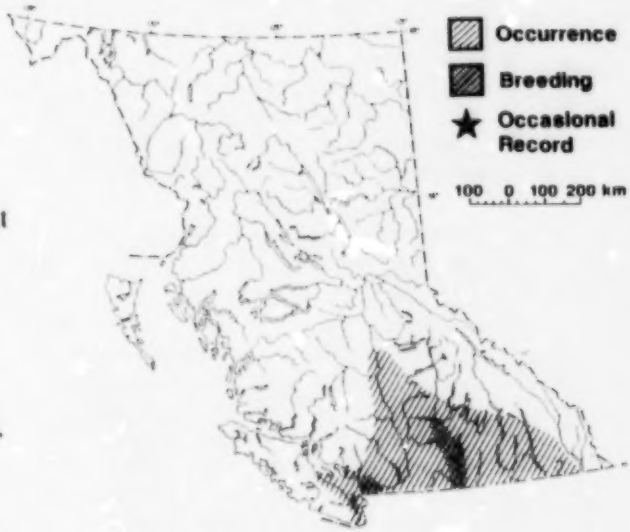
Northern Pygmy-Owl
Glaucidium gnoma



STATUS AND DISTRIBUTION: Uncommon resident across the province, including Vancouver Island, south of the Chilcotin-Cariboo Basin. Rare along the northern mainland coast and in the central interior. Very rare in the northwest interior.

COMMENTS: Identification - A tiny owl with a long tail (for its size) and two black patches (false eyes) on the back of the head. Generally gray-brown upperparts, underparts lighter with black/brown streaks. **Measurements: Length** - Male 16-17 cm (6.3-6.9 in.), Female 18-19 cm (7.1-7.5 in.). Weight - Male 34-47 g (1.2-1.6 oz.), Female 36-51 g (1.3-1.8 oz.).

Burrowing Owl
Athene cunicularia



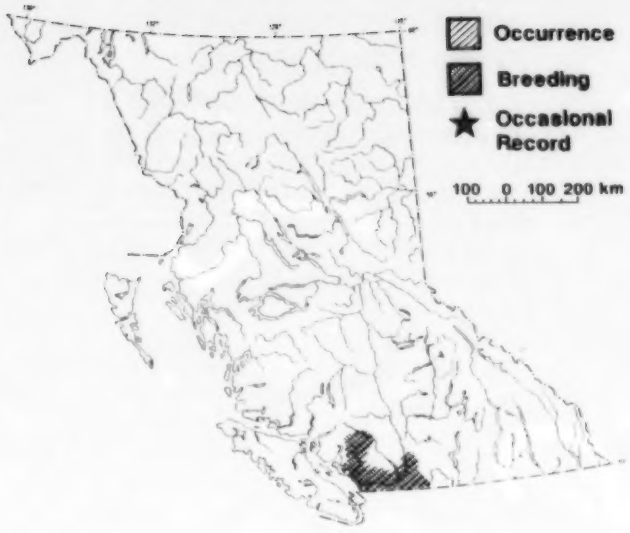
STATUS AND DISTRIBUTION: Very rare to rare local summer visitant in the Thompson-Okanagan Plateau; casual in winter. Formerly very rare resident, now very rare winter visitant to the Fraser River delta. Casual elsewhere, including southeastern Vancouver Island, the Chilcotin-Cariboo Basin, and the Kootenay Trench. Breeds.

COMMENTS: Identification - A sandy-coloured owl with no ear tufts, long, nearly unfeathered legs, and short tail. Lives in open desert-like habitats or open but tall grasslands. **Measurements: Length** - Male 21-27 cm (8.4-10.6 in.), Female 23-28 cm (8.9-11.2 in.). **Weight** - Male 180-212 g (6.3-7.4 oz.), Female 195-223 g (6.8-7.8 oz.).

Spotted Owl
Strix occidentalis

STATUS AND DISTRIBUTION: Rare, local resident on the extreme south mainland coast. Breeds.

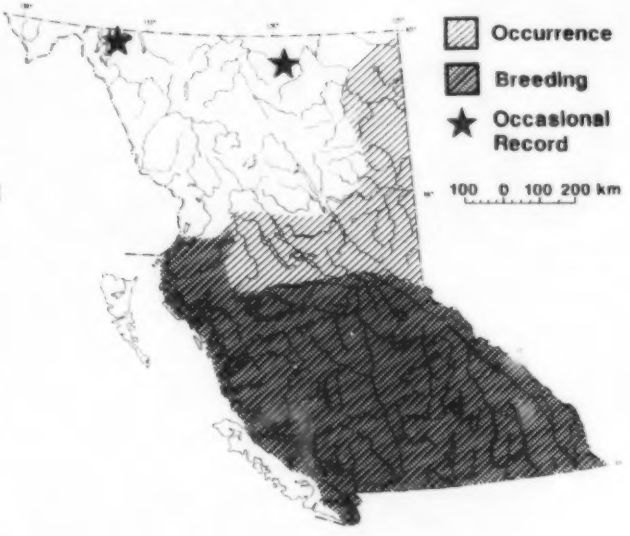
COMMENTS: Identification - A medium-sized owl that is chocolate brown, with light spots and dark eyes. White spots also on top of head. No gray as in Barred Owl. No ear tufts. Underparts barred. **Measurements: Length** - Male 39-56 cm (15.3-21.8 in.), Female 45-61 cm (18.0-23.9 in.). **Weight** - Male 31-52 g (10.9-18.0 oz.), Female 38-59 g (13.4-20.7 oz.).



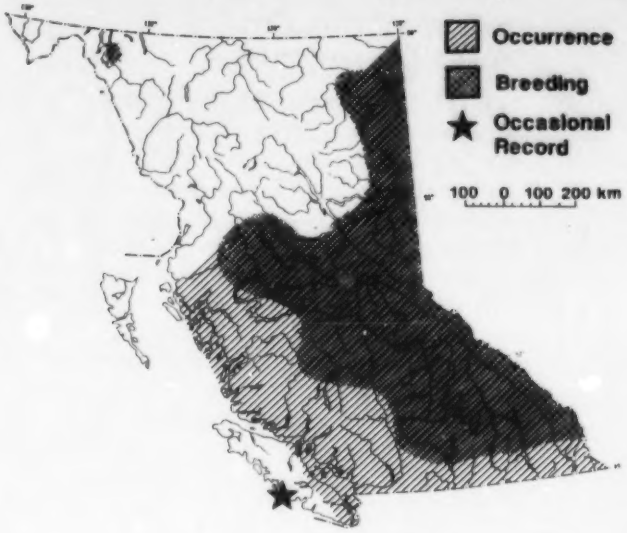
Barred Owl
Strix varia

STATUS AND DISTRIBUTION: Rare to uncommon resident on southeastern Vancouver Island, the Gulf Islands, adjacent mainland coast including the Fraser Lowlands and the interior south of Prince George. Elsewhere, rare to uncommon. Widespread breeder.

COMMENTS: Identification - A medium-sized, gray-brown owl with horizontal barring on neck and vertical barring on upper breast. Big head with dark eyes and no tufts. During the past 40 years, since its arrival in the northern part of the province, the Barred Owl has expanded its range to southern areas, reaching the coast in 1966. **Measurements: Length** - Male 41-56 cm (16.1-22.3 in.), Female 45-62 cm (17.8-24.2 in.). **Weight** - Male 330-570 g (11.6-20.0 oz.), Female 388-651 g (13.6-22.8 oz.).



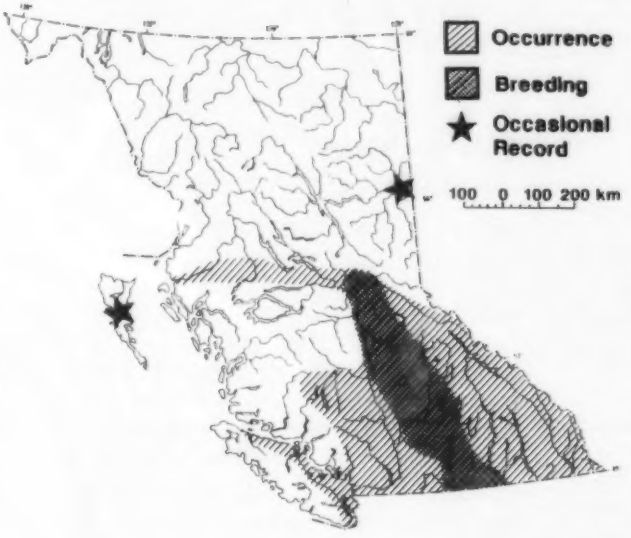
Great Gray Owl
Strix nebulosa



STATUS AND DISTRIBUTION: An uncommon resident in the northern interior and rare resident in the southern interior. Very rare, but irregular, winter visitant to the extreme south mainland coast; casual on Vancouver Island. Breeds.

COMMENTS: Identification - A very large, all gray-brown owl with a distinctive white "bow-tie" on its throat. The facial disk is large, the eyes are yellow. **Measurements: Length** - Male 61-76 cm (24.3-29.8 in.), Female 67-85 cm (26.4-33.3 in.). **Weight** - Male 1056-1385 g (37-48.5 oz.), Female 1077-1524 g (37.7-53.3 oz.).

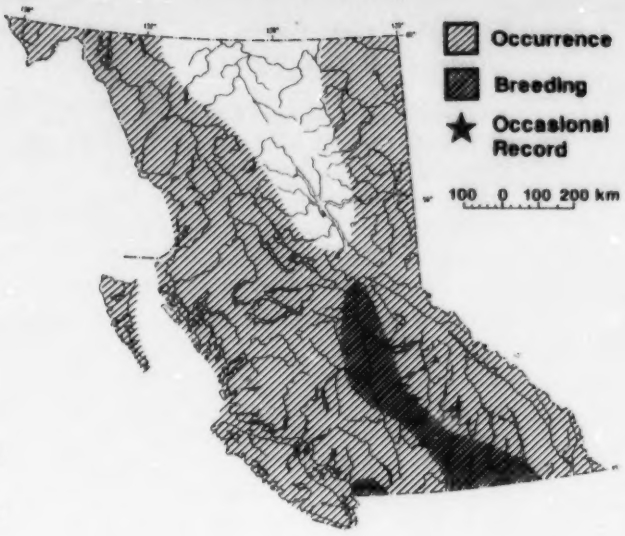
Long-eared Owl
Asio otus



STATUS AND DISTRIBUTION: Uncommon resident, locally in the Thompson-Okanagan Plateau. Rare to very rare north to Prince George; very rare in the east and west Kootenays. Rare resident on the extreme south mainland coast, very rare along the east coast of Vancouver Island. Casual on the northern mainland coast, accidental on the Queen Charlotte Islands. Breeds.

COMMENTS: Identification - A medium-sized owl with long central "ear tufts" between the eyes and a boldly striped chest and abdomen. The facial disk is reddish-brown. **Measurements: Length** - Male 32-36 cm (13.0-13.9 in.), Female 33-41 cm (13.1-13.9 in.). **Weight** - Male 215-300 g (7.5-10.5 oz.), Female 227-334 g (8-11.7 oz.).

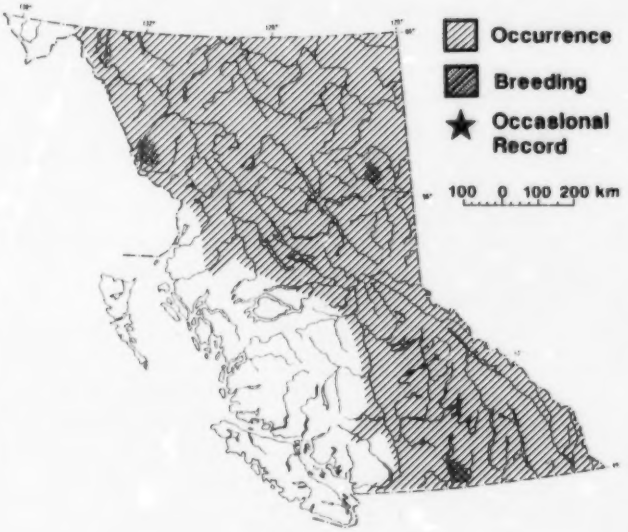
Short-eared Owl
Asio flammeus



STATUS AND DISTRIBUTION: Uncommon spring and autumn migrant throughout the province. Uncommon resident on the extreme southwest coast, rare resident in the Okanagan valley and very rare resident in the Peace Lowlands. Casual in winter in the north. Local breeder on the extreme south mainland and in the south and central interior.

COMMENTS: Identification - A medium-sized owl with a small facial disk and very small central "ear tufts" which are situated between the eyes. Look closely for them. The general colour is buffy to buffy-white. It has a dark wrist mark under the wings. **Measurements: Length** - Male 33-43 cm (13.3-16.9 in.), Female 36-44 cm (14.3-17.1 in.). **Weight** - Male 261-346 g (9.2-12.1 oz.), Female 276-429 g (9.7-15 oz.).

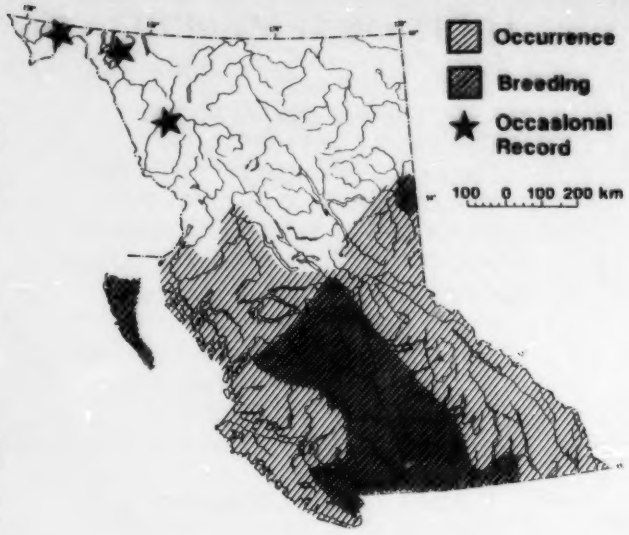
Boreal Owl
Aegolius funereus



STATUS AND DISTRIBUTION: Rare resident in the northern interior and probably a rare resident at higher elevations in the southern interior. Irregular, but very rare winter visitant, to lower elevations in the southern interior. Probably a widespread breeder. Casual in autumn and winter west of the Coast Mountains.

COMMENTS: Identification - A small owl with no "ear tufts." It has a pale yellow bill and light spots on the forehead. General colour is brown, at time gray-brown. Immatures are uniform dark brown with light eyebrows and cheeks.
Measurements: Length - Male 21-26 cm (8.3-10.4 in.), Female 23-31 cm (9.2-12.2 in.). **Weight** - Male 192-227 g (6.8-7.9 oz.), Female 199-235 g (7-8.2 oz.).

Northern Saw-whet Owl
Aegolius acadicus



STATUS AND DISTRIBUTION: Rare to uncommon resident on the Queen Charlotte Islands, southeastern Vancouver Island, and across interior British Columbia south of 51°N latitude; rare to very rare summer visitant, and casual in winter to the north. Very rare along the west coast of Vancouver Island and northern mainland coast. Also, probably an uncommon to fairly common local spring and autumn migrant. Breeds.

COMMENTS: Identification - A small owl without "ear tufts." It has a dark bill and light streaks on the forehead. General colour is brown. Large facial disk without dark borders. Immatures have dark brown upperparts, rich buffy-brown belly and white triangle between eyes. **Measurements: Length** - Male 18-21 cm (7.1-8 in.), Female 18-22 cm (7.2-8.6 in.). **Weight** - Male 84-120 g (3-4.2 oz.), Female 87-124 g (3.1-4.3 oz.).

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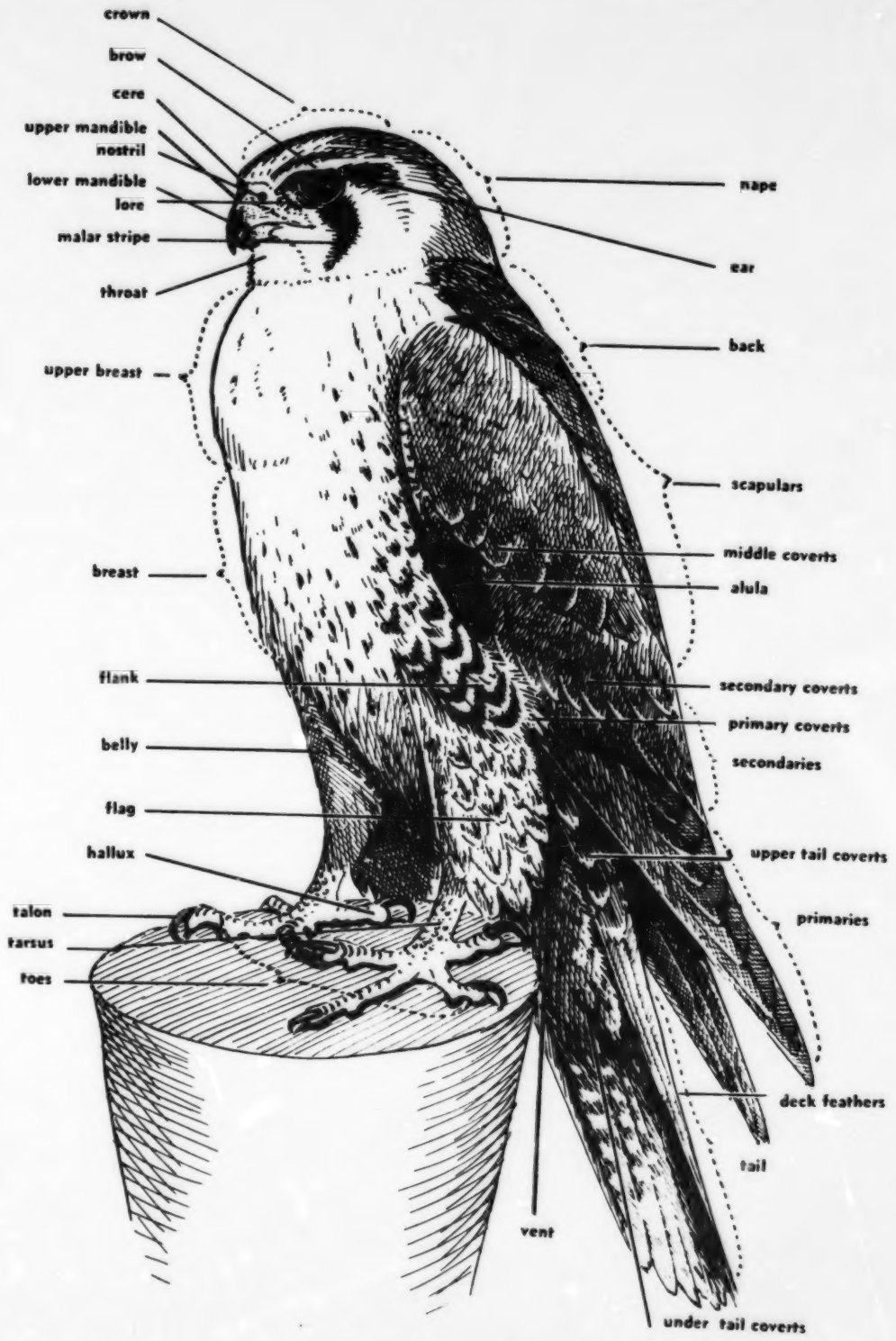
APPENDIX I. THE PARTS OF A FALCON

Beebe, 1974



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